

# 海桐花属一些种类的新异名

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## New synonymies of some species of *Pittosporum* (*Pittosporaceae*)

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**Abstract** As part of a revision of Chinese *Pittosporum* Banks ex Gaertn. for the forthcoming account of Pittosporaceae in "Flora of China", Volume 9, eight names, all described from China, are reduced to synonymy as follows: *P. illicioides* Makino var. *angustifolium* T. C. Huang ex S. Y. Lu, syn. nov. and *P. illicioides* var. *stenophyllum* P. L. Chiu ex H. T. Chang & S. Z. Yan, syn. nov., both under *P. illicioides*; *P. densinervatum* H. T. Chang & S. Z. Yan, syn. nov. and *P. longicarpum* S. K. Wu ex C. Y. Wu, syn. nov., both under *P. kweichowense* Gowda var. *kweichowense*; *P. polycarpum* H. T. Chang & S. Z. Yan, syn. nov. under *P. paniculiferum* H. T. Chang & S. Z. Yan; *P. membranifolium* S. C. Huang ex C. Y. Wu, syn. nov. under *P. perryanum* Gowda var. *perryanum*; *P. monanthum* C. Y. Wu, syn. nov. under *P. podocarpum* Gagnep. var. *podocarpum*; and *P. tobira* (Thunb.) W. T. Aiton var. *chinense* S. Kobayashi, syn. nov. under *P. tobira*.

**Key words** Pittosporaceae; *Pittosporum*; New synonymies

### 1 海金子

***Pittosporum illicioides*** Makino in Bot. Mag. Tokyo 14: 32. 1900. TYPE: Japan. Harima: Kishima-mura in Ibo-gori, Feb 1900, U. Ouye s.n. (holotype, not seen).

*P. illicioides* var. *angustifolium* T. C. Huang ex S. Y. Lu in Quart. J. Chin. Forest. 10: 144. 1977, syn. nov. TYPE: China. Taiwan (台湾), Taizhong (台中), Heping Xiang, Bi Lu Xi, without date (fr.), S. Y. Lü (吕胜由) 5916 (holotype, TAIF, not seen).

*P. illicioides* var. *stenophyllum* P. L. Chiu ex H. T. Chang & S. Z. Yan in Fl. Reip. Pop. Sin. 35(2): 16. 1979, syn. nov. TYPE: China. Zhejiang (浙江), Longquan (龙泉), streamside in valley, 700 m, without date, S. Y. Zhang (章绍尧) 3262 (holotype, HHBG, not seen).

*P. illicioides* var. *stenophyllum* is considered to differ from *P. illicioides* var. *illicioides* in having leaves narrowly lanceolate, 10~18 cm × 1.7~3.3 cm. However, these characters fall with-

in the range of variation of typical *P. illicioides*. *P. illicioides* var. *angustifolium* (described from Taiwan) represents the extreme of the continuous range of variation, with leaves linear, 5~15 cm × 0.6~2 cm.

Distribution: China(Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangsu, Jiangxi, Sichuan, Taiwan, and Zhejiang), Japan.

In forests, thickets, valleys, and along streamsides from 100~2200 m in altitude.

## 2 贵州海桐

**Pittosporum kweichowense** Gowda, J. Arnold Arbor. 32: 296. 1951. TYPE: China. Guizhou (贵州), Anlong "Anlung" (安龙), 500 m, light woods, 1930-10-20, Y. Tsiang (蒋英) 7444 (holotype, NY, not seen).

*P. densinervatum* H. T. Chang & S. Z. Yan in Acta Phytotax. Sin. 16(4): 86. 1978, syn. nov. TYPE: China. Hunan (湖南), Longshan (龙山), forest margin, 1060 m, without date, L. H. Liu (刘林翰) 1942 (holotype, IBSC!).

*P. longicarpum* S. K. Wu ex C. Y. Wu, Fl. Yunnan. 3: 314, pl. 90: 2. 1983, syn. nov. TYPE: China. Yunnan (云南): Wenshan (文山), forest, 1958-09-24 (fr.), H. T. Tsai (蔡希陶) 58-8053 (holotype, KUN; photo, PE!).

The original description of *P. densinervatum* indicated that it differs from *P. kweichowense* in having elliptic leaves 2~3 cm wide. However, this character is quantitative and clearly falls within the range of variation of *P. kweichowense*. *P. longicarpum* is considered to differ from *P. kweichowense* in having oblong capsules 15~20 mm long, and longer fruiting pedicels. However, based on our studies these characters show continuous variation and there are no other characters that distinguish *P. kweichowense* from *P. longicarpum* S. K. Wu ex C. Y. Wu.

Distribution: China[SW Guizhou (Anlong), W Hunan (Zhijiang, Longshan), and SE Yunnan (Wenshan)].

In forests, thickets, and along riversides from 500~2000 m in altitude.

## 3 圆锥海桐

**Pittosporum paniculiferum** H. T. Chang & S. Z. Yan in Acta Phytotax. Sin. 16(4): 90. 1978. TYPE: China. Yunnan (云南), Lincang (临沧), Mayidui, without date, J. S. Xin (辛景三) 406 (syntype, IBSC!); ibid., J. S. Xin (辛景三) 523 (syntype, KUN, not seen).

*P. polycarpum* H. T. Chang & S. Z. Yan, Acta Phytotax. Sin. 16(4): 90. 1978, syn. nov. TYPE: China. Sichuan (四川), Mt. Emei (峨眉山), without date, Y. X. Xiao (肖永贤) 49736 (syntype, SYS!); ibid., G. H. Yang (杨光辉) 54650 (syntype, SZ, not seen).

*P. polycarpum* is considered to differ from *P. paniculiferum* in having capsules subglobose and seeds more numerous; however, these character states also occur in the latter species. *P. polycarpum* was omitted from the treatment of the genus in *Flora Reipublicae Popularis Sinicae* (Chang & Yan, 1979).

Distribution: China[C Sichuan (Mt. Emei) and S Yunnan].

In forests, thickets, and on limestone slopes from 500~1600 m in altitude.

## 4 缝线海桐

**Pittosporum perryanum** Gowda in J. Arn. Arb. 32: 290. 1951. TYPE: China. Guangxi

(广西), Shiwandashan (Sup Man Ta Shan) (十万大山), 1937-07-21, H. Y. Liang (梁向日) 69823 (holotype, A, not seen, isotype, IBSC!).

*P. membranifolium* S. C. Huang ex C. Y. Wu, Fl. Yunnan. 3: 314. Pl. 90: 3. 1983, syn. nov. TYPE: China, Yunnan (云南), Shuangjiang (双江), 1957-09-20 (fr.), J. S. Xin (辛景三) 1089 (holotype, KUN; photo, PE!).

*P. membranifolium* is considered to differ from *P. perryanum* in having leaves longer, 16 ~ 22 cm, apex cuspidate to abruptly acuminate, and capsules larger, 25 ~ 32 mm × 14 ~ 17 mm. However, these morphological characters also occur in *P. perryanum*, and thus the establishment of *P. membranifolium* is not supported.

Distribution: China [W Guangdong (Xinyi), S Guangxi, SW Hainan, S Sichuan (Changning, Hejiang), and S Yunnan].

In forests, thickets, valleys, and on slopes and stream sides from 600 ~ 1800 m in altitude.

## 5 柄果海桐

**Pittosporum podocarpum** Cagnep. in Notul. Syst. (Paris) 8: 211. 1939. TYPE: China. W. China (中国西部), 1904, Wilson 3231 (syntype, P, not seen); ibid., Wilson 3231a (syntype, P, not seen); Chongqing (重庆), Chengkou "district Tchen-keou-tin" (城口), [Chengkou], without date (fl. & fr.), Farges 1166 (syntype, P, not seen); Yunnan (云南), Binchuan (宾川) "Pin-tchouan" [Binchuan], without date, Ducloux 6709 (syntype, P, not seen).

*P. monanthum* C. Y. Wu, Fl. Yunnan. 3: 318. Pl. 91: 2. 1983, syn. nov. TYPE: China. Yunnan (云南), Jingdong (景东), forest, 1963-05-15 (fl.), C. A. Wu (武全安) 9222 (holotype, KUN; photo, PE!).

The original description of *P. monanthum* indicated that it is close to *P. podocarpum* but differs in having leaves oblanceolate, lateral veins few, in 4 or 5 pairs, flowers solitary, pedicels very shortly pilose, and calyx cupular and pilose. We have observed all these characters in several specimens of *P. podocarpum* from Sichuan, and found that these characters are quantitative and clearly fall within the variation range of *P. podocarpum*.

Distribution: China (Fujian, Gansu, Guangxi, Guizhou, Hubei, Hunan, Shaanxi, Sichuan, Xizang, and Yunnan), India, Myanmar and Vietnam.

In forests and shady places, and on slopes and riversides from 500 ~ 2700 (~ 3000) m in altitude.

## 6 海桐

**Pittosporum tobira** (Thunb.) W. T Aiton, Hort. Kew. 2: 27. 1811. — *Euonymus tobira* Thunb. in Nova Acta Regiae Soc. Sci. Upsal. 3: 208. 1780. TYPE: described from Japan, not seen.

*P. tobira* var. *chinense* S. Kobayashi in J. Jpn. Bot. 57: 74. 1982, syn. nov. TYPE: China. Jiangsu (江苏), Suzhou (苏州), without date, S. Oka 359 (holotype, TI, not seen).

The original description of *P. tobira* var. *chinense* indicated that it is close to *P. tobira* var. *tobira*, but in the former inflorescences having appressed, short, soft hairs, while in the latter inflorescences having long-armed hairs, and the stalks are composed of 5 ~ 7 cells. Except the type specimen collected from Suzhou of Jiangsu Province, up to now there is no record from China. How-

ever, in the specimens of Kyushu and Korea, short-and long-armed hairs are mixed about half and half on an inflorescence (Kobayashi, 1982). Therefore, we are reluctant to accept var. *chinense* as a distinct taxon, and prefer to regard it as a synonym of *P. tobira* var. *tobira*.

Distribution: China (Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hubei, Jiangsu, Sichuan, Yunnan, and Zhejiang).

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### References

Chang H-T (张宏达), Yan S-Z (颜素珠), 1979. Hamamelicaceae. In: Flora Reipublicae Popularis Sinicae. Beijing: Science Press. 35(2): 1~36  
Kobayashi Sumiko, 1982. A taxonomical note on *Pittosporum tobira* and its allied species. J Jpn Bot, 57: 70~80

**摘要** 作为对英文版“Flora of China”海桐花科的分类学修订结果，提出了海桐花属6个种的8个新异名，并分别进行了讨论。

**关键词** 海桐花科；海桐花属；新异名

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